AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of indexing a substrate relative to a printhead between printing consecutive transverse scans of the printhead in the printing of an image on the substrate, wherein the printhead is mounted to a carrier that is transversely moveable across a bridge that extends transversely across a printing station fixed along the longitudinal path of a substrate in a printing machine, the method comprising:

indexing the substrate to move the substrate longitudinally an incremental distance relative to and through the printing station;

measuring the actual distance, relative to the printing station, moved by the substrate during the indexing; ~~and~~

determining ~~from the measuring~~ the difference between the measured actual distance moved by the indexing of the substrate and the incremental distance the substrate was to move by the indexing; and

in response to the determined difference, adjusting the longitudinal position of the printhead relative to the carrier by the amount of the determined difference.

2. (Currently Amended) The method of claim **1** wherein:

the indexing of the substrate is carried out by driving a feed element an amount predetermined to move the substrate longitudinally the incremental distance through ~~a~~ the printing station.

3. (Currently Amended) The method of claim **1** further comprising:

printing a row of an image across the indexed substrate by scanning transversely by moving the carrier across the bridge with the printhead thereon in the adjusted longitudinal position.

4. (Withdrawn and Currently Amended) The method of claim **1** further comprising:

printing a second of the consecutive transverse scans of the printhead by scanning transversely by moving the carrier across the bridge with the printhead in the adjusted longitudinal position on the carriage; then,

between printing the second of the consecutive transverse scans of the printhead and a next consecutive transverse scan of the printhead in the printing of the image on the substrate, further indexing the substrate longitudinally the incremental distance modified by the amount that the longitudinal position of the printhead was adjusted.

5. (Withdrawn and Currently Amended) The method of claim **1** further comprising:

the measuring of the actual distance moved by the substrate includes measuring the distance relative to a fixed frame of a printing machine with an encoder fixed to the frame.

6. (Currently Amended) The method of claim **1** further comprising:

the measuring of the actual distance moved by the substrate includes measuring the distance relative to the longitudinal position of the printhead with an encoder fixed to the bridge.

7. (Currently Amended) A method of ink jet printing comprising:

moving an ink jet printhead across a bridge at a printing station and therewith printing~~, with a printhead at a printing station,~~ a first row of an image transversely across a substrate that is stationary at ~~a~~ the printing station;

then, feeding the substrate longitudinally through the printing station in response to a feed signal from a controller that is representative of a given feed distance, and measuring the actual distance that the substrate moves longitudinally when so fed;

then, calculating~~, as~~ a correction distance~~, the given feed distance less~~ corresponding to the measured actual distance less the given feed distance;

then, adjusting the longitudinal position of the printhead by moving the printhead longitudinally the calculated correction distance relative to the substrate that is stationary at the printing station;

then, ink jet printing a further row of the image transversely across a substrate, with the printhead in the adjusted longitudinal position while the substrate is stationary at ~~a~~ the printing station.

8. (Withdrawn) The method of claim **7** further comprising:

after printing the further row of the image, further feeding the substrate longitudinally through the printing station in response to a feed signal from the controller, the feed signal being representative of a given feed distance less the calculated correction distance.

9. (Withdrawn) The method of claim **7** further comprising:

after printing the further row of the image, moving the printhead longitudinally to bring the printhead to a reference position;

further feeding the substrate longitudinally through the printing station in response to a feed signal from the controller that is representative of the given feed distance less the calculated correction distance and adjusted distance.

10. (Withdrawn and Currently Amended) The method of any of claims **1-6** or **20-21** wherein:

the adjusting includes moving the printhead longitudinally in the direction of the indexing when the actual distance is ~~greater~~ less than the incremental distance and in a direction opposite the direction of the indexing when the actual distance is ~~less~~ greater than the incremental distance.

11. (Withdrawn and Currently Amended) The method of any of claims **7** or **8** wherein:

the ink jet printing is carried out with the printhead moving transversely across ~~a~~ the bridge and with the printhead ~~is~~ moved longitudinally by moving the bridge longitudinally relative to a fixed frame.

12. (Currently Amended) The method of any of claims **7** or **8** wherein:

the ink jet printing is carried out with the printhead moving transversely across a bridge and with the printhead ~~is~~ moved longitudinally by moving the printhead longitudinally relative to the bridge.

13. (Currently Amended) An ink jet printing apparatus comprising:

a frame;

a bridge extending transversely across the frame and defining a position of a printing station relative to the frame;

a feed system configured to advance a substrate longitudinally through the printing station;

a printhead moveable transversely across the bridge to print a row of the image across the substrate at the printing station;

a motion system connected to the bridge and configured to move the printhead longitudinally relative to the frame;

a controller operable to activate the feed system to ~~perform an indexing motion of~~ index the substrate longitudinally a predetermined distance through the printing station;

a web position measurement device mounted to the bridge and operable to measure, and communicate to the controller a signal corresponding to, an actual distance moved by the substrate through the printing station during the indexing ~~motion~~ of the substrate; and

the controller being operable to activate the motion system, in response to the signal, to move the printhead longitudinally, relative to the indexed substrate, a correction distance corresponding to the predetermined distance less the actual distance moved by the substrate during the indexing of the substrate ~~motion less the predetermined distance~~.

14. (Withdrawn) The apparatus of claim **13** wherein:

the bridge is longitudinally moveable relative to the frame by the motion system; and

the controller is operable to activate the motion system to move the bridge longitudinally relative to the frame to thereby move the printhead longitudinally the correction distance.

15. (Withdrawn) The apparatus of claim **14** wherein:

the motion system includes a linear servo motor having a longitudinally extending stator fixed to the frame and an armature fixed to the bridge and responsive to the controller.

16. (Currently Amended) The apparatus of claim **13** wherein:

the bridge has a carrier transversely moveable thereon;

the printhead is longitudinally moveable relative to the ~~bridge~~ carrier in response to the activation of ~~by~~ the motion system to adjust the longitudinal position thereof relative to the substrate at the printing station; and

the controller is operable to activate the motion system to move the printhead longitudinally relative to the bridge to thereby move the printhead longitudinally the correction distance.

17. (Currently Amended) The apparatus of any of claims **13** through **16** wherein:

the web position measurement device includes an encoder responsive to the motion of the substrate relative thereto and operable to generate the signal corresponding to an actual distance moved by the substrate through the printing station during the indexing of the substrate.

18-19. (Canceled)

20. (Withdrawn) The method of claim **1** wherein:

the adjusting of the longitudinal position of the printhead is carried out by moving the bridge longitudinally relative to a fixed frame or moving the printhead longitudinally relative to the bridge.

21. (Previously Presented) The method of claim **1** wherein:

the adjusting of the longitudinal position of the printhead is carried out by moving the bridge longitudinally relative to a fixed frame.